



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION 5

77 WEST JACKSON BOULEVARD

CHICAGO, IL 60604-3590

REPLY TO THE ATTENTION OF:

S-6J

MEMORANDUM

DATE: JUN 24 2010

SUBJECT: ENFORCEMENT ACTION MEMORANDUM – Determination of Threat to Public Health or the Environment at the Lindsay Light II Site/DuSable Park, Chicago, Cook County, Illinois (Site Spill ID #YT, OU 4)

FROM: Verneta Simon, On-Scene Coordinator *VS*
Emergency and Enforcement Response Branch II, Response Section IV

THRU: Linda M. Nachowicz, Branch Chief *LN* FOR LN
Emergency and Enforcement Response Branch II

TO: Richard C. Karl, Director
Superfund Division

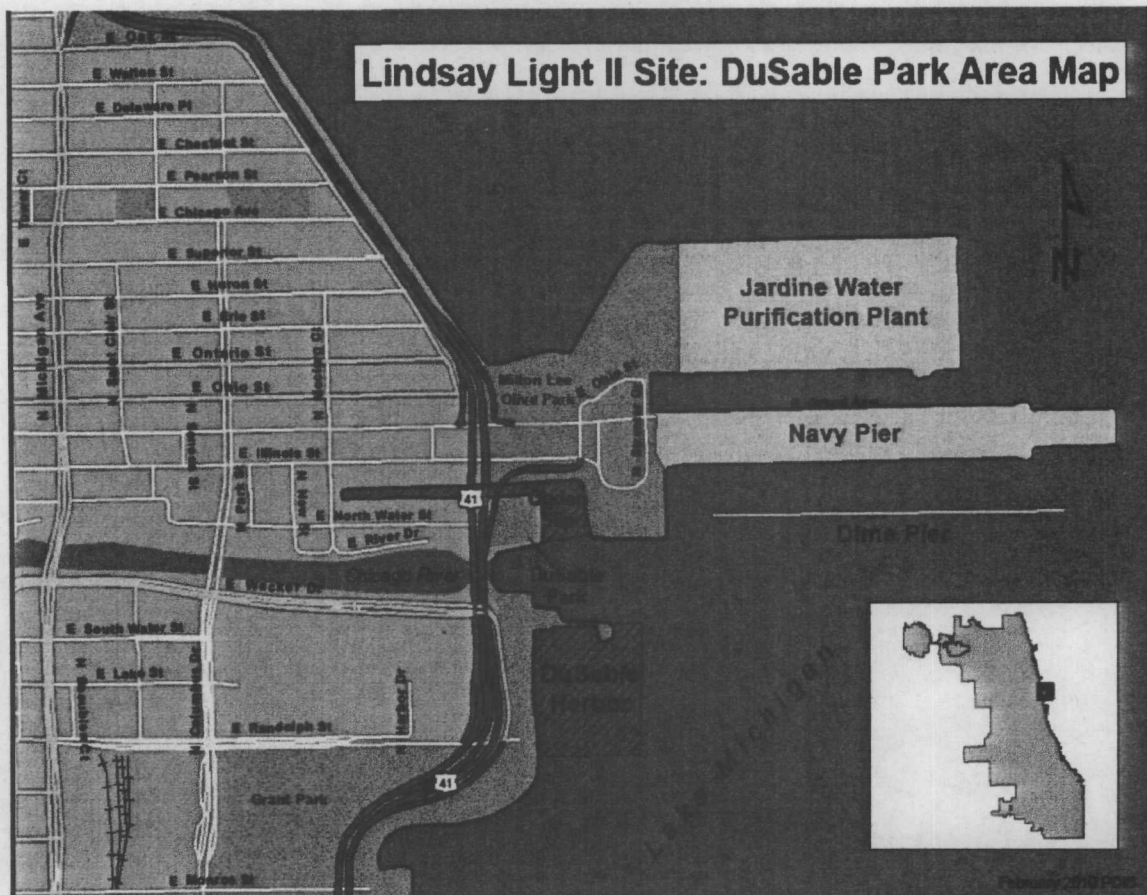
I. PURPOSE

The purpose of this Memorandum is to document the determination of an imminent and substantial threat to public health and the environment posed by the existence of thorium-impacted soils at Lindsay Light II ("Lindsay Light") Operable Unit ("OU") 04, DuSable Park Site ("Site"). DuSable Park is a 3.5 -acre peninsula located at the terminus of North Water Street immediately east of Lake Shore Drive (Figure 1).

On November 27, 2000, U.S. EPA requested permission from the owner of the Site, the Chicago Park District (Park District) to conduct a radiological walkover of this future park to determine whether there were any elevated readings at the surface that might indicate the presence of subsurface radioactive materials. The Park District agreed to give us access and U.S. EPA conducted the walkover in December 2000. During the December 2000 survey, U.S. EPA collected samples and took gamma readings. Sample results ranged from 3.65 picoCuries per gram (pCi/g) to 10,420 pCi/g total radium. Our clean-up criterion is 7.1 pCi/g total radium. As a result of the survey, U.S. EPA designated this property as potentially thorium contaminated. In June 2002 Kerr-McGee Chemical LLC (K-M), the corporate successor to Lindsay Light Company (Lindsay) and now known as Tronox, LLC, (Tronox) performed a limited site investigation which identified five areas of elevated radiation concentrations. Eventually, K-M, performed a limited removal at the Park in October 2002. Although K-M removed some thorium contaminated material, some additional contaminated material remained.



Figure 1



In June of 2007, an EPA employee noticed construction activities at DuSable Park. The Lindsay team contacted the Chicago Park district and Shelbourne Development Group (Shelbourne), the Chicago Calatrava Spire developer and discovered that Shelbourne had, begun using DuSable Park for a construction staging area. Without any notification to EPA, Shelbourne had conducted grubbing work which included removal of shrubs and grass from the perimeter of the Park and had erected jersey barriers. Later in 2007, Shelbourne conducted intrusive work for the construction of the mid-level Lake Shore Drive ramp. While prepping the area for the ramp in October 2007, STS Consultants (now known as AECOM), consultants for Shelbourne, encountered thorium-impacted soils below a concrete slab at an approximate depth of 5 feet. The highest sample result indicated 180 pCi/g total radium. STS remediated an area of approximately 50' x 50'. Tronox manifested and transported off-site a total of six Baker Boxes (80 cubic yards), under U.S. EPA approved protocol, to the proper disposal facility. U.S. EPA took verification samples that showed a total radium concentration of 3.5 pCi/g, and as a result U.S. EPA released the area for construction.

On March 10, 2008, while conducting soil screening for an access road, STS discovered a small area with elevated readings (about 70,000 cpm which is about 3 – 4 times the cleanup level). The area was located at the western edge of the southern mound

about 6 feet below the original mound surface (i.e., within the mound fill/soil material). STS investigated the area immediately surrounding the spot and found that the elevated readings appeared confined to an area of about 1-2 square feet. STS's probing of the area indicated that the elevated material was confined to what appeared to be a fist-sized piece of material. Because of the limited size, STS placed the material in a super-sack along with some of the soil surrounding the object (less than ½ cubic yard). Gamma readings of the soil after removal of object were about 9,500 to 12,000 cpm. STS submitted the fist-size piece of material for gamma spectroscopy analysis (Sample S/3-4). STS submitted the results of the analysis to USEPA via email on March 14, 2008. Pursuant to a U.S. EPA request, STS forwarded the sample to USEPA's National Air and Radiation Environmental Laboratory (NAREL). NAREL determined the sample to be 440 pCi/g.

On March 25, 2008, STS discovered a small area with gamma readings at or slightly above the gamma meter cutoff threshold. The cutoff threshold equates to approximately 7.1 pCi/g, the clean up criteria for Streeterville. STS discovered the area while cutting back the western edge of the southern soil mound for a ramp access road per the December 20, 2007 scope of work. The majority of the readings ranged from the 18,000 to 23,000 cpm (cutoff 19,017 cpm). The area is located near the top of the southern mound at its western edge. That same day, STS fenced the area (about 4 X 12 feet) with orange snow-fence and attached radiological warning placards to the fence. STS did not conduct remediation of this area since it did not interfere with the construction or the use of the new ramp access road. STS intended to perform remediation of the area at the same time it remediated the other historical soil mound hot spots. However, with the downturn of the economy Shelbourne has not completed construction of the Spire building nor has it conducted the remediation.

This site is not on the National Priorities List (NPL).

II. SITE CONDITIONS AND BACKGROUND

CERCLIS ID# ILD 0000002212

Please refer to the previous Action Memoranda dated July 11, 1994, October 5, 1995, April 22, 1996, September 22, 1999, March 28, 2000, March 1, 2001, July 17, 2002, July 18, 2005, January 17, 2006, November 7, 2006, and April 25, 2008 for a description of site conditions and background. Action memoranda and administrative records are fully incorporated by reference into this document.

Historically, DuSable Park was a lumber yard and coal yard. Various structures were located on the Site throughout the 1800 until the mid-1900's. Fill has been placed on the Site and may include natural deposition of sand, Chicago Harbor and channel dredge spoils, building demolition rubble and gravel. More recently the Site was a weed filled mound with no commercial use.

As stated above, in 2000 U.S. EPA discovered elevated areas of thorium contamination at DuSable Park. In 2002, Tronox conducted a limited removal but areas

of contamination remain at the Site to date and the Site has never been fully investigated to determine the extent of contamination.

In 2007, Shelbourne entered into an agreement with the Chicago Park District and began reconfiguring the Site as a staging area for construction of the Calatrava Spire. Since the Park District and Shelbourne entered into the agreement, Shelbourne and U.S. EPA have conducted numerous walkover and subsurface investigations at the Site. Shelbourne moved soils during 2007 and 2008 and shaped the Site into its current configuration including an entrance ramp to Lake Shore Drive and three soil mounds: one large berm along the northern side of the property approximately 2,500 cubic yards ; one mound in the northwest area of the Site approximately 1,500 cubic yards ; and one in the southeast area of the Site approximately 600 cubic yards. Currently, the site is fenced off, the mounds are tarped to control dust and vegetation has begun to grow on the mounds. Aerial photographs of DuSable Park from July 2000 and July 2008 are available in Attachment II. Due to the current economic climate the fate of the property is unknown since Shelbourne Development is still trying to get financing to complete the Chicago Spire. Furthermore, the City of Chicago has lost the bid for the 2016 Olympics which may have provided financial assistance for Park development. Plans are underway to develop approximately 250 boat slips at Dime Pier, which is adjacent to Navy Pier. Navy Pier is immediately east of DuSable Park. Dime Pier is a new marina between Navy Pier and the Chicago River's outlet to Lake Michigan. The Chicago River's outlet is on the south side of DuSable Park. On February 5 and 16, 2010, the City of Chicago's Department of Environment (CDOE) informed U.S. EPA that by April 15, 2010, Commonwealth Edison needs to restore electrical service to the north side of the Lake Shore Drive Bridge over the main branch of the Chicago River because of U.S. Coast Guard regulations to have a secondary power source for drawbridge operations. In the past, Shelbourne had provided a back-up generator for the bridge. The generator has been removed. To restore electrical power, CDOE has proposed extensive intrusive work at DuSable Park. Subsequently, on March 3, 2010, Commonwealth Edison informed U.S. EPA that it would not conduct the intrusive work until it provided notification to U.S. EPA that work needed to commence. Recently, U.S. EPA was contacted by Charlene Walsh, City of Chicago Department of Transportation, who stated the proposed intrusive work was imminent and could be begin as early as May 2010 and for U.S. EPA to expect a scope of work.

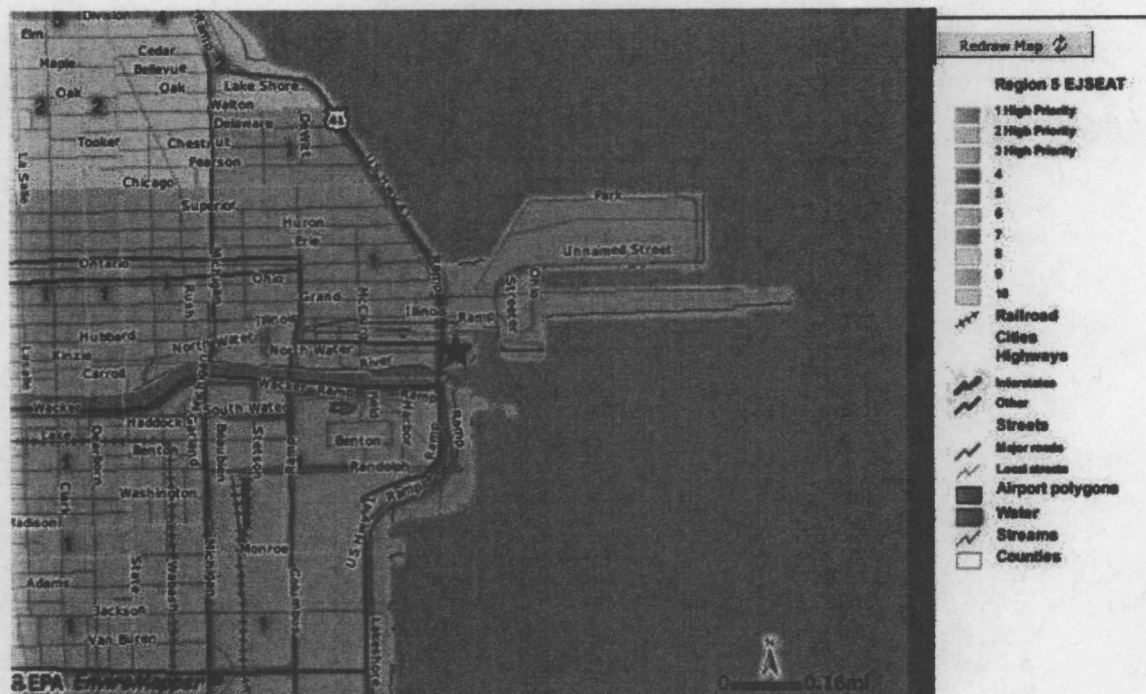
R5 Superfund EJ Analysis for Lindsay Light II/ DuSable Park Site

The area surrounding the Lindsay Light Site II/OU 4/DuSable Park Site was screened for Environmental Justice (EJ) concerns using Region 5's EJ Assist Tool (which applies the interim version of the national EJ Strategic Enforcement Assessment Tool (EJSEAT)). Although surrounding real estate is considered some of the most expensive real estate in Chicago, census tracts with a score of 1, 2, or 3 are considered to be high-priority potential EJ areas of concern according to EPA Region 5. Lindsay Light II/OU 4/DuSable Park Site is in a census tract with a score of 1 (Figure 2). Upon closer analysis, within 1 miles of DuSable Park the demographics are as follows: the population is 23.9 % minority and 6.7 % of the population is living below the poverty level.

Additional demographic is available below Figure 2. Therefore, Region 5 does not consider this site to be a high-priority potential EJ area of concern.

Figure 2

Lindsay Light II/OU 4/DuSable Park Site Map Showing EJ SEAT Values For Surrounding Area



III. THREAT TO PUBLIC HEALTH OR THE ENVIRONMENT, AND STATUTORY AND REGULATORY AUTHORITIES

Conditions at the Lindsay Light II Site/DuSable Park may pose an imminent and substantial endangerment to public health or welfare or the environment, based upon factors set forth in the National Contingency Plan (NCP), 40 Code of Federal Regulations (CFR) 300.415 (b)(2). These factors include:

- a) Actual or potential exposure to nearby populations, animals, or the food chain from hazardous substances or pollutants or contaminants:

DuSable Park is approximately one-third mile east of Lindsay Light II Site/OU00 (also known as (AKA River East), 316 East Illinois Street. In the 1990's, approximately 30,000 cubic yards of thorium-contaminated soil was excavated from the Lindsay Light II Site. The highest soil sample to date from DuSable Park indicated 451 pCi/g total radium, which is almost 64 times the clean-up criterion EPA has established for Streeterville. EPA's clean-up criterion is 7.1 pCi/g total radium. Sometime after April 15, 2010, Commonwealth Edsion at the

request of the City of Chicago, intends to excavate portions of DuSable Park and during these construction activities thorium- contaminated soils may be released.

- b) High levels of hazardous substances or pollutants or contaminants in soils largely at or near the surface that may migrate:

Commonwealth Edison plans to excavate portions of the Site and, if proper measures to identify and control radiological contamination are not implemented, thorium-contaminated wastes may be released during construction work. Past Lindsay Light Action Memoranda corroborates the presence of contamination in n soils near the surface in Streeterville and at DuSable Park. To date, approximately 55,000 cubic yards have been shipped to EnergySolutions (formerly Envirocare) of Utah for off-site disposal. Since 1993, U.S. EPA has been involved in clean-up of the thorium contamination throughout Streeterville. In approximately 1936, the Lindsay Light Company left Streeterville and moved its operations to the City of West Chicago, Illinois. In West Chicago, during the 1990's, U.S. EPA designated four National Priorities List Sites and ordered the cleanup of more than 670 residential properties impacted by thorium, a public park, a sewage treatment plant and nearly eight miles of creek and river. Similarly, as a result of Lindsay Light's operations in Streeterville, widespread radiological contamination also may be present in Streeterville but may be more difficult to detect due to the presence of sidewalks, streets, and buildings that may shield buried contamination.

- c) Other situations or factors which may pose threats to public health or welfare or the environment:

The Lindsay Light Company (Lindsay) manufactured, at several locations in the Streeterville neighborhood of Chicago, gas lights and gas mantles for residential and commercial use beginning in approximately 1904. The historic record regarding Lindsay's volume of thorium production in Streeterville is uncertain. According to a U.S. Tariff Commission document on the Incandescent Gas-Mantle Industry published in 1920, in 1914 Lindsay expanded its thorium manufacturing capacity in Chicago to meet the increased domestic and foreign demand caused by the outbreak of war in Europe. The production of thorium for the gas light mantles resulted in a sandy waste known as mill tailings that was often used as fill material. The November 1935 Lindsay Board of Directors' Meeting minutes discussed plans to move Lindsay's Streeterville operations to the City of West Chicago by September 1936. The West Chicago facility became known as the Rare Earths Facility or REF. In West Chicago, Lindsay and its successors continued to produce thorium as well as other radioactive materials for commercial and defense-related purposes. As a result of Lindsay's Rare Earths Facility thorium manufacturing and disposal activities, four West Chicago areas were listed on the National Priorities List of Superfund Sites.

In the West Chicago area, U.S. EPA, with the assistance of the Illinois Emergency Management Agency, Division of Nuclear Safety (IEMA/DNS), formerly known as the Illinois Department of Nuclear Safety, IEMA/DNS, has overseen the clean-up of over 670 properties in residential areas, a 100-acre public park, a sewage treatment plant, and beginning in the Spring of 2005, the clean-up of over six miles of creek and river in DuPage County. The widespread use and dispersal of the thorium material as fill in West Chicago likely reflects a similar widespread dispersal of the Lindsay Light thorium residuals in Chicago. Unlike the relatively open areas in the City of West Chicago where the extensive nature of the thorium contamination was relatively easy to identify, most of the Lindsay Light thorium in downtown Chicago was shielded from detection by asphalt, sidewalks, streets, and buildings. Consequently, appropriate response actions are necessary to assure construction activities will not result in the uncontrolled exposure to or release of thorium contamination or improper disposal of the thorium-contaminated soils at or from the Site.

IV. ENDANGERMENT DETERMINATION

Given the nature of the site, the nature of the contaminants – radioactive materials that cause external exposure, inhalation, ingestion, and direct contact hazards, as described in Sections III, the actual threatened releases of hazardous substances from this site, if not addressed by implementing the response action described in this Action Memorandum, may pose an imminent and substantial endangerment to public health, or imminent and substantial endangerment to public health, or welfare, or the environment due to these radioactive materials.

V. PROPOSED ACTIONS

Currently, the City of Chicago Department of Environment (CDOE) has submitted a proposed scope of work to restore Commonwealth Edison electrical service to the north side of the Lake Shore Drive Bridge over the main branch of the Chicago River. The proposed work includes placement of a manhole (approximately 8' x 8' x 8'), trench and conduit bank placement (approximately 2' x 4' trench by 220' in length), and pulling of cable and splicing at the Site. The proposed scope of work indicates that radiation monitoring will take place for underground activities, but lacks any mention of who will do the monitoring and how contaminated material will be handled and disposed of when encountered.

Besides the above-mentioned monitoring activities at DuSable Park, U.S. EPA is not aware of any other current proposed actions. U.S. EPA is aware that the Park District plans to develop the area into a park someday and the seawall is in a state of disrepair and needs replacement. However, final elevation plans of DuSable Park, and the seawall (dock wall) construction design/permits have not been shared with U.S. EPA. In addition, U.S. EPA has not received copies of any U.S. Army Corps of Engineers permits that were mentioned in a joint letter on September 21, 2009, from Mr. Timothy J.

Mitchell, Superintendent & CEO, Chicago Park District, and Mr. Sadhu Johnston, Chief Environmental Officer, City of Chicago, to Administrator Lisa Jackson.

Once the OSC knows the final elevation plan, seawall design and/or permits, post-removal site control can be determined. Any post-removal site controls proposed will be consistent with Section 300.415(k) of the NCP.

The response actions described in this memorandum directly address actual or threatened releases of hazardous substances, pollutants or contaminants at the facility which may pose an imminent and substantial endangerment to public health and safety, and to the environment. These response actions do not impose a burden on the affected property to the extent which that property contributes to the conditions being addressed.

Applicable or Relevant and Appropriate Requirements (ARARs)

All applicable or relevant and appropriate requirements (ARARs) of Federal law will be complied with to the extent practicable. The primary federal Applicable or Relevant and Appropriate Regulation for radioactive soil cleanup criteria is Title 40, Part 192 of the Code of Federal Regulations, "Health and Environmental Protection Standards for Uranium and Thorium Mill Tailings." Ancillary ARARs include the Nuclear Regulatory Commission's (NRC) Title 10, Part 20, of the Code of Federal Regulations, "Standards for Protection Against Radiation," NRC Regulatory Guide 1.86, "Termination of Operating License for Nuclear Reactors," and the Department of Transportation's Title 49 for shipping hazardous materials. Relevant U.S. EPA guidance includes OSWER Directive No. 9200.4-25, issued February 12, 1998, regarding the "Use of Soil Cleanup Criteria in 40 CFR Part 192, as Remediation Goals for CERCLA Site."

Many of the regulations carried out by the NRC have been delegated to the Illinois Emergency Management Agency, Division of Nuclear Safety. The State has previously identified the regulations at 32 Ill. Administrative Code 332, Licensing Requirements for Source Material Milling Facilities which contain the licensing requirements for source material milling facilities in Illinois as relevant and appropriate to the cleanup of thorium in Streeterville. The cleanup standard for soils and sediment at the Site derived from the foregoing federal and state regulations is 7.1 pCi/g combined radium.

U.S. EPA will also implement the principle of ALARA (As Low As Reasonably Achievable) which refers to the cleanup of all materials above the cleanup standard. ALARA is described in DOE and NRC orders and regulations and in U.S. EPA regulations at 40 CFR §192.22. U.S. EPA made the decision to achieve ALARA in an attempt to maximize protection of human health.

VI. CHANGE IN THE SITUATION SHOULD ACTION BE DELAYED

Delayed or non-action may result in increased likelihood of external exposure, inhalation, ingestion or direct contact to human populations accessing and working on the

ENFORCEMENT CONFIDENTIAL ADDENDUM

**LINDSAY LIGHT II SITE/OU04, DUSABLE PARK
CHICAGO, COOK COUNTY, ILLINOIS**



















FEBRUARY 2010

(REDACTED 3 PAGES)

**ENFORCEMENT CONFIDENTIAL
NOT SUBJECT TO DISCOVERY**

**ADMINISTRATIVE RECORD INDEX
FOR
LINDSAY LIGHT II
OPERABLE UNIT 4
DUSABLE PARK**










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	357076	05	01-01-1111	US EPA LETTER RE: ROCK SAMPLE DATA FROM DUSABLE PARK	2
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<input checked="" type="checkbox"/>	<u>226454</u>	05	11-09-2001	COVINGTON & BURLING LETTER RE: DUSABLE PARK AERIAL PHOTOGRAPHS (ITEMS ATTACHED)	3
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<input type="checkbox"/>	<u>236010</u>	05	12-07-2001	US EPA - MAP RE: DUSABLE PARK TOTAL GAMMA LEVELS	1
<input checked="" type="checkbox"/>	<u>226452</u>	05	12-12-2001	COVINGTON & BURLING LETTER RE: COMMENTS ON KERR MCGEES 11/12/01 DUSABLE PARK INVESTIGATION WORK PLAN	3
<input checked="" type="checkbox"/>	<u>235990</u>	05	01-02-2002	EPA LETTER RE: RESPONSE TO 12/11/01 LETTER ON DUSABLE PARK DEVELOPMENT & REMOVAL OF RADIOACTIVE MATERIAL	2
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<input type="checkbox"/>	<u>226445</u>	05	01-31-2002	NEWSPAPER ARTICLE - AFTER THE CLEANUP, A BOATHOUSE PERCHANCE?	1
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<input type="checkbox"/>	<u>226444</u>	05	02-07-2002	EPA LETTER RE: CHICAGO PARK DISTRICT COMMENTS ON DUSABLE INVESTIGATION WORK PLAN	4
<input type="checkbox"/>	<u>226467</u>	05	02-12-2002	KERR MCGEE CHEMICAL - (REV 02/12/02) INVESTIGATION WORK PLAN FOR DUSABLE PARK (RESPONSE TO EPA COMMENTS ATTACHED)	100
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<input type="checkbox"/>	<u>226472</u>	05	03-11-2002	EPA LETTER RE: ROCK SAMPLE DATA FOR DUSABLE PARK (ANALYTICAL RESULTS ATTACHED)	2
<input type="checkbox"/>	<u>226391</u>	05	03-28-2002	NEWSPAPER ARTICLE - TESTING TO BEGIN AT DUSABLE PARK	2
<input type="checkbox"/>	<u>236012</u>	05	04-05-2002	POST CARD - (EXHIBIT & SYMPOSIUM) DUSABLE PARK: HIDDEN IN PLAIN VIEW	2
<input type="checkbox"/>	<u>226433</u>	05	04-12-2002	EPA LETTER RE: APPROVAL OF DUSABLE REVISED INVESTIGATION WORK PLAN	1
<input type="checkbox"/>	<u>235995</u>	05	04-22-2002	KERR MCGEE CHEMICAL CORP LETTER RE: TRANSMITTAL OF ACCESS AGREEMENT FOR DUSABLE PARK	1
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<input type="checkbox"/>	226437	05	08-16-2002	EPA LETTER RE: COMMENTS ON DUSABLE INVESTIGATION REPORT	7
<input type="checkbox"/>	226392	05	08-29-2002	NEWSPAPER ARTICLE - DUSABLE PARK TESTS POSITIVE FOR THORIUM	1
<input type="checkbox"/>	226386	05	09-13-2002	NEWSPAPER ARTICLE - IT'S BIZARRE (PLANS FOR NEW LAKEFRONT PARK IN LIMBO (NEGOTIATING CLEANUP OF CONTAMINATED DUSABLE PARK SITE STALLS PROJECT)	3
<input type="checkbox"/>	226469	05	09-13-2002	KERR MCGEE CHEMICAL LETTER RE: RESPONSE TO 08/16/02 EPA COMMENTS ON INVESTIGATION WORK PLAN FOR DUSABLE PARK	101
<input checked="" type="checkbox"/>	226429	05	09-18-2002	CHICAGO PARK DISTRICT LETTER RE: RESPONSE TO 08/16/02 EPA COMMENTS ON LIMITED REMOVAL ACTION WORK PLAN FOR DUSABLE PARK	4
<input type="checkbox"/>	236002	05	10-04-2002	CHICAGO PARK DISTRICT LETTER RE: DISSATISFACTION ON KERR MCGEE'S PERFORMANCE OF ENVIRONMENTAL REMEDIATION AT DUSABLE PARK	1
<input type="checkbox"/>	238011	05	10-04-2002	SITE PHOTOGRAPHS - DUSABLE PARK	3
<input checked="" type="checkbox"/>	226466	05	10-05-2002	NEWSPAPER ARTICLE - PARK SITE CLEANUP NOT DONE, CITY SAYS	1
<input type="checkbox"/>	356409	05	10-07-2002	CHAIN OF CUSTODY RECORDS - DUSABLE PARK	3
<input type="checkbox"/>	357088	05	10-08-2002	CHAIN OF CUSTODY RECORDS - DUSABLE PARK W/TRANSMITTAL SHEET	4
<input type="checkbox"/>	226393	05	10-14-2002	NEWSPAPER ARTICLE - TAINTED LAKEFRONT SITE GETS CLEANUP; CONTAMINATION A BIG OBSTACLE TO DUSABLE PARK	2
<input checked="" type="checkbox"/>	226426	05	10-23-2002	JOURNAL ARTICLE - COAL COMBUSTION: NUCLEAR RESOURCE OR DANGER	9
<input checked="" type="checkbox"/>	226428	05	10-23-2002	US DOE ARTICLE - Y-12 STUDY ON COAL ASH RISKS FROM EXPOSURE	1
<input type="checkbox"/>	226427	05	10-23-2002	EPA ARTICLE - TENORM	6
<input type="checkbox"/>	226425	05	11-25-2002	LIST OF 11/25/02 DUSABLE PARK MEETING	1
<input checked="" type="checkbox"/>	236004	05	11-25-2002	ISGS - FORMATION & USE OF COAL COMBUSTION RESIDUES FROM THREE TYPES OF POWER PLANTS BURNING IL COALS	4
<input type="checkbox"/>	226475	05	12-06-2002	FRIENDS OF THE PARK TRANSMITTAL OF LETTERS RELATED TO REMEDIATION OF DUSABLE PARK	3
<input checked="" type="checkbox"/>	226424	05	01-07-2003	EPA MEMO RE: RADIOCHEMICAL RESULTS FOR DUSABLE PARK	18
<input checked="" type="checkbox"/>	236005	05	01-07-2003	KERR MCGEE CHEMICAL CORP LETTER RE: TRANSMITTAL OF RADIOLOGICAL ANALYSIS OF 10/07/02 EPA SAMPLES	1
<input type="checkbox"/>	226388	05	01-23-2003	NEWSPAPER ARTICLE - 'THE BALL IS ROLLING'	2

	357091	05	02-18-2003	US EPA EMAIL RE: DUSABLE PARK - HAZEN RESEARCH INC ANSWERS TO USEPA QUESTIONS FEB 14 FLOTATION GAMMA SPEC	32
	226423	05	03-03-2003	EPA MEMO RE: MAP OF PHASE I ENVIRONMENTAL ASSESSMENT	2
	226421	05	03-31-2003	NEWSPAPER ARTICLE - CITY HOLDS BRIDGE DESIGN COMPETITION	2
	236006	05	04-29-2003	EPA MEMO RE: COMMENTS ON DETERMINATION SOURCE OF RADIOACTIVITY IN SOIL SAMPLES FOR DUSABLE PARK DATED 12/12/02	2
	226477	05	09-16-2003	104(E) LETTER - DUSABLE PARK (PRP LIST ATTACHED)	28
	226419	05	10-30-2003	NEWSPAPER ARTICLE - EARLY PLAN COMPLETED FOR DUSABLE PARK	3
	226390	05	03-11-2004	NEWSPAPER ARTICLE - 3 UNTAMED ACRES	2
	226389	05	03-18-2004	NEWSPAPER ARTICLE - DUSABLE PARK GETS EARLY FUNDING	2
	226396	05	03-25-2004	NEWSPAPER ARTICLE - DUSABLE PARK NEEDS A PUSH	3
	236076	05	09-29-2004	NEWSPAPER ARTICLE - MONEY HOLDS KEY FOR DUSABLE PARK	1
	348149	05	04-01-2005	COLLINS ENGINEERS - UNDERWATER INVESTIGATION OF THE DUSABLE PARK DOCKWALL ALONG THE MAIN BRANCH OF THE CHICAGO RIVER W/JAN 8, 2008 E-MAIL RE: CONDITION AND REPLACEMENT OF RIVER WALL	34
	232903	05	04-29-2005	NEWSPAPER ARTICLE - "FIRM OFFERS VISION FOR DUSABLE PARK"	1
	248542	05	12-29-2005	NEWSPAPER ARTICLE - "LAKEFRONT HAS NEW COSTLY HURDLE"	2
	248543	05	12-29-2005	NEWSPAPER ARTICLE - "LAKEFRONT HAS NEW COSTLY HURDLE - \$6 MILLION NEEDED TO REPLACE SEAWALL"	2
	287940	05	08-01-2006	CHICAGO PARK DISTRICT - FRAMEWORK PLAN FOR DUSABLE PARK	7
	357086	05	04-18-2007	US EPA LETTER RE: LINDSAY LIGHT RADIOACTIVE THORIUM CONTAMINATION IN STREETERVILLE AREA RIGHTS OF WAY & PROPERTIES	5
	357085	05	05-17-2007	COVINGTON & BURLING LLP LETTER RE: MANAGEMENT OF TENORM RESIDUALS FROM STREETERVILLE AREA RIGHTS-OF WAY W/ATTACHMENTS	31
	356291	05	06-29-2007	STS CONSULTANTS - STANDARD OPERATING PROCEDURE - 210 FOR RADIOLOGICAL SURVEYS W/COVER MEMO - DUSABLE PARK	5
	348134	05	07-18-2007	US EPA LETTER RE: PRECAUTIONS TAKEN TO MINIMIZE SOIL DISTURBANCE	2

	<u>348135</u>	05	07-20-2007	STS E-MAIL MESSAGE RE: SURFACE SCREENING RESULTS FOR AREAS DISTURBED DURING PLACEMENT OF JERSEY BARRIER ALONG SHEET PILE BARRIER W/ATTACHED SOP - GAMMA RADIOLOGICAL SURVEYS	9
	<u>348136</u>	05	07-31-2007	FREEBORN & PETERS LETTER RE: RESPONSE TO EPA'S LETTER DATED 7/31/07	2
	<u>348137</u>	05	08-06-2007	STS E-MAIL MESSAGE RE: RAD SCREENING ON NORTHERN MOUND AND CONSTRUCTION OF PROPOSED RAMP	1
	<u>348138</u>	05	08-13-2007	US EPA E-MAIL MESSAGE RE: REVEIW OF AND COMMENTS TO INFORMATION IN E-MAIL DATED 8/7/07 RE: RADIATION MONITORING AND CONSTRUCTION OF LAYDOWN AREA	2
	<u>357084</u>	05	08-30-2007	US EPA LETTER RE: LINDSAY LIGHT RADIOACTIVE THORIUM CONTAMINATION IN STREETERVILLE AREA RIGHTS-OF-WAY	5
	<u>348139</u>	05	10-02-2007	US EPA E-MAIL MESSAGE RE: RAD SCREENING FOR DUSABLE PARK	1
	<u>348140</u>	05	10-03-2007	US EPA E-MAIL MESSAGE RE: QUESTIONS ABOUT IMAGES CAPTURED IN PHOTOGRAPHS TAKEN ON 9/25 AT THE FUTURE DUSABLE PARK	1
	<u>356292</u>	05	10-08-2007	STS CONSULTANTS - SKETCH OF ELEVATED GAMMA READINGS LOCATIONS W/COVER MEMO - DUSABLE PARK	2
	<u>356295</u>	05	10-10-2007	STS CONSULTANTS EMAIL RE: RADIOLOGICAL SCREENING RESULTS OCT 9, 2007 - DUSABLE PARK	1
	<u>348141</u>	05	10-11-2007	STS E-MAIL RE: TRANSMITTAL OF MAP/SKETCH SHOWING LOCATIONS OF ELEVATED GAMMA READINGS	2
	<u>356298</u>	05	10-15-2007	STS CONSULTANTS - SAMPLE RESULTS FOR SPLIT COLLECTED BY EPA OCT 15, 2007 W/COVER MEMO - DUSABLE PARK	7
	<u>356293</u>	05	10-19-2007	STS CONSULTANTS - NUTRANI RESULTS AND VERIFICATION FOR SAMPLES COLLECTED OCT 19, 2007 W/COVER MEMO - DUSABLE PARK	2
	<u>348142</u>	05	10-25-2007	STS E-MAIL RE: ON OCT 26 STS WILL CONTINUE TO CUT INTO AND SCREEN THE MOUNDED SOIL TO THE EAST OF THE CURRENT EXCAVATION WHERE THE RAMP FROM LAKE SHORE DRIVE IS TO BE CONSTRUCTED	2
	<u>356296</u>	05	10-25-2007	STS CONSULTANTS EMAIL RE: SAMPLE COLLECTION - DUSABLE PARK	1
	<u>356289</u>	05	10-26-2007	STS CONSULTANTS - NUTRANI RESULTS AND VERIFICATION FOR SAMPLES COLLECTED OCT 26, 2007 W/COVER MEMO - DUSABLE PARK	3
	<u>317071</u>	05	10-31-2007	BUSINESS NEWS ARTICLE - DU SABLE PARK, PALMER SQUARE, & LOGAN SQUARE SITE TO RECEIVE CITY ASSISTANCE	1

<input checked="" type="checkbox"/>	<u>357089</u>	05	11-17-2007	US EPA EMAIL RE: DUSABLE PARK VERIFICATION SAMPLING & SURVEY PERFORMED ON NOVEMBER 16 2007	2
<input type="checkbox"/>	<u>348143</u>	05	11-30-2007	STS E-MAIL RE: TRANSMITTAL OF CROSS SECTION DRAWING FOR REMEDIATED AREA ON NORTHERN MOUND AT DUSABLE PARK	3
<input checked="" type="checkbox"/>	<u>348145</u>	05	12-20-2007	STS - SCOPE OF WORK FOR RADIOLOGICAL SCREENING / NEW ACCESS ROAD-SOUTH MOUND AREA, DUSABLE PARK W/ATTACHMENTS	7
<input checked="" type="checkbox"/>	<u>348144</u>	05	12-21-2007	STS - SCOPE OF WORK FOR REMOVAL OF RADIOLOGICALLY-IMPACTED MATERIAL W/COVER LETTER	83
<input type="checkbox"/>	<u>357090</u>	05	12-21-2007	FREEBORN & PETERS EMAIL RE: DUSABLE PARK SCOPE OF WORK (SOW) FOR REMOVAL OF RADIOLOGICALLY IMPACTED MATERIAL	38
<input checked="" type="checkbox"/>	<u>348150</u>	05	01-08-2008	FREEBORN & PETERS E-MAIL RE: TRANSMITTAL OF 2 REPORTS AND CONDITION AND REPLACEMENT OF RIVER WALL	109
<input type="checkbox"/>	<u>348146</u>	05	01-14-2008	STS LETTER RE: SURCHARGE LOADING OF THE EXISTING SEAWALL AT DUSABLE PARK	1
<input checked="" type="checkbox"/>	<u>348147</u>	05	01-23-2008	POWER POINT PRESENTATION RE: DUSABLE PARK MEETING - WEDNESDAY, JANUARY 23, 2008	26
<input checked="" type="checkbox"/>	<u>348148</u>	05	01-30-2008	STS LETTER RE: STOCKPILE SURCHARGE LOADING OF THE EXISTING SEAWALL AT DUSABLE PARK W/ATTACHED CALCULATION SHEET	4
<input checked="" type="checkbox"/>	<u>287991</u>	05	02-07-2008	CHICAGO PARK DISTRICT LETTER RE: DUSABLE PARK THORIUM ISSUES	165
<input type="checkbox"/>	<u>357087</u>	05	02-26-2008	US EPA EMAIL RE: DUSABLE PARK ELEVATED GAMMA READING OBSERVED DURING SCREENING THIS MORNING - W/REPLY HISTORY	1
<input type="checkbox"/>	<u>356286</u>	05	03-10-2008	STS CONSULTANTS MEMO RE: DISCOVERY OF LIMITED AREA OF ELEVATED GAMMA IN SOUTHERN MOUND - DUSABLE PARK	1
<input checked="" type="checkbox"/>	<u>356285</u>	05	03-13-2008	STS CONSULTANTS - GAMMA SPECTROSCOPY RESULTS - DUSABLE PARK W/COVER MEMO	7
<input checked="" type="checkbox"/>	<u>356288</u>	05	03-17-2008	EPA HANDOUT FROM MAR 17, 2008 MEETING W/COVER MEMO - DUSABLE PARK	1
<input checked="" type="checkbox"/>	<u>357079</u>	05	04-11-2008	FREEBORN & PETERS EMAIL RE: STS RESPONSE PLAN TO ELEVATED MATERIAL FOUND AT SOUTHERN MOUND W/HISTORY	4
<input checked="" type="checkbox"/>	<u>357081</u>	05	04-17-2008	STS CONSULTANTS EMAIL RE: DUSABLE - SUMMARY & STATUS OF MARCH 25 2007 DISCOVERY	1
<input type="checkbox"/>	<u>357082</u>	05	04-25-2008	FREEBORN & PETERS EMAIL RE: DUSABLE PARK REQUEST TO SUBMIT A TOPO MAP OF SITE W/REPLY HISTORY	5
<input checked="" type="checkbox"/>	<u>304918</u>	05	05-20-2008	EPA LETTER RE: COMMENTS & ADDITIONS TO 12/12/07 SOW ON REMOVAL OF RADIOACTIVE IMPACTED MATERIAL ON DUSABLE PARK & 05/13/08	2

				SOW ON RADIOLOGICAL SCREENING INSTALLATION OF ELECTRICAL CONDUIT VAULTS & MANHOLES	
	<u>356281</u>	05	07-09-2008	GENERAL NOTICE LETTER - SHELBOURNE DEVELOPMENT GROUP - DUSABLE PARK	4
	<u>356282</u>	05	07-18-2008	RESPONSE TO GENERAL NOTICE LETTER - SHELBOURNE DEVELOPMENT GROUP - DUSABLE PARK	1
	<u>303441</u>	05	08-19-2008	EPA LETTER RE: COMMENTS ON DUSABLE WORK PLAN DATED 06/30/08	4
	<u>363232</u>	05	01-30-2009	US EPA MEMO RE: QAPP REQUIREMENTS FOR SAMPLING DURING REMOVAL ACTIVITIES	3
	<u>321387</u>	05	02-02-2009	SITE PHOTOGRAPHS - DUSABLE PARK	6
	<u>323456</u>	05	03-17-2009	SITE PHOTOGRAPHS	30
	<u>363234</u>	05	03-18-2009	FREEBORN & PETERS E-MAIL MESSAGE RE: TRANSMITTAL OF ATTACHED RESPONSES TO QUESTIONS & 2 REVISED MAPS PREPARED BY AECOM/STS	9
	<u>356283</u>	05	09-21-2009	CITY OF CHICAGO LETTER RE: REQUEST FOR SUPPORT FOR DUSABLE PARK CLEANUP	21
	<u>345952</u>	05	10-29-2009	EPA LETTER RE: RESPONSE TO REQUEST FOR SUPPORT FOR DUSABLE PARK IMPROVEMENT	3
	<u>356726</u>	05	12-23-2009	JOURNAL ARTICLE - NEW SLOTS FOR BOATERS: GATEWAY HARBOR MARINA CONSTRUCTION EXPECTED TO START IN MARCH	3
	<u>356294</u>	05	02-05-2010	CITY OF CHICAGO EMAIL RE: SCOPE OF WORK FOR RESTORATION OF COMED SERVICE AND MAP OF FUTURE WORK - DUSABLE PARK	2
	<u>353177</u>	05	02-11-2010	EPA LETTER RE: DUSABLE PARK MAINTENANCE PLAN	2
	<u>363233</u>	05	02-12-2010	REED SMITH LETTER RE: TRANSMITTAL OF ATTACHED SITE MAINTENANCE PLAN FOR DUSABLE PARK	9
	<u>356290</u>	05	02-16-2010	CITY OF CHICAGO EMAIL RE: COMED POWER SUPPLY WORK - DUSABLE PARK	1
	<u>348105</u>	05	02-25-2010	ADMINISTRATIVE RECORD SITE INDEX - LINDSAY LIGHT II OU4 / DUSABLE PARK - ORIGINAL (DRAFT)	8

Lindsay Light II Site: Aerial Photo 1

E Illinois St

41

41

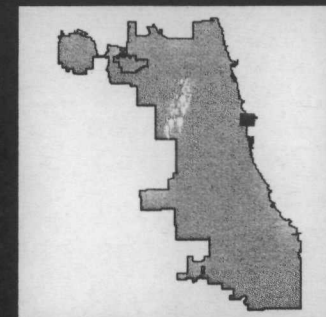
E North Water St

Chicago
Spire

Du Sable
Park

E River Dr

Site of Chicago Spire
and Du Sable Park
July 2000



Attachment III

Overview					
Total Persons:	31905	Land Area:	100%	Households in Area:	21148
Population Density:	23922.24 /sq mi	Water Area:	0%	Housing Units in Area:	24383
Percent Minority:	23.9%	Persons Below Poverty Level:	2098 (6.7%)	Households on Public Assistance:	134
Percent Urban:	100%	Housing Units Built <1970:	40%	Housing Units Built <1950:	12%

Race and Age*			
(* Columns that add up to 100% are highlighted)			
Race Breakdown	Persons (%)	Age Breakdown	Persons (%)
White:	25347 (79.4%)	Child 5 years or less:	806 (2.5%)
African-American:	2261 (7.1%)	Minors 17 years and younger:	1540 (4.8%)
Hispanic-Origin:	1497 (4.7%)	Adults 18 years and older:	30364 (95.2%)
Asian/Pacific Islander:	3251 (10.2%)	Seniors 65 years and older:	4611 (14.5%)
American Indian:	26 (0.1%)	This space intentionally left blank	
Other Race:	319 (1.0%)		
Multiracial:	701 (2.2%)		

Gender	
Gender Breakdown	Persons (%)
Males:	15087 (47.3%)
Females:	16818 (52.7%)

Education	
Education Level (Persons 25 & older)	Persons (%)
Less than 9th grade:	196 (0.7%)
9th - 12th grade:	472 (1.8%)
High School Diploma:	1682 (6.3%)
Some College/2 yr:	4557 (16.9%)
B.S./B.A. or more:	19984 (74.3%)

Language	
Ability to Speak English	Persons (%)

Lindsay Light II Site: Aerial Photo 2

E Illinois St

41

41

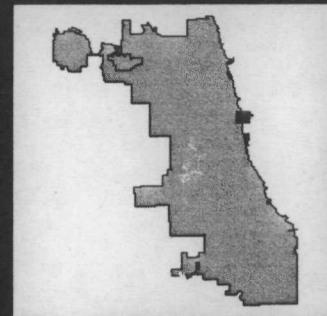
E North Water St

**Chicago
Spire**

**Du Sable
Park**

E River Dr

**Site of Chicago Spire
and Du Sable Park
July 2008**



Population Age 5 and Over:	31148
Speak only English:	24550 (78.8%)
Non-English at Home:	6597 (21.2%)
Speak English very well:	4712 (15.1%)
Speak English well:	1350 (4.3%)
Speak English not well:	485 (1.6%)
Speak English not at all:	50 (0.2%)
Speak English less than well:	535 (1.7%)

Language Spoken	
Language Spoken	Persons (%)
Speak only English:	25126 (79.1%)
Spanish or Spanish Creole:	1367 (4.3%)
French (incl. Patois, Cajun):	649 (2.0%)
Portuguese or Portuguese Creole:	111 (0.4%)
German:	357 (1.1%)
Yiddish:	25 (0.1%)
Other West Germanic Languages:	73 (0.2%)
Scandinavian Languages:	75 (0.2%)
Greek:	162 (0.5%)
Russian:	373 (1.2%)
Polish:	253 (0.8%)
Serbo-Croatian:	155 (0.5%)
Other Slavic Languages:	72 (0.2%)
Armenian:	33 (0.1%)
Persian:	142 (0.4%)
Gujarathi:	95 (0.3%)
Hindi:	187 (0.6%)
Urdu:	66 (0.2%)
Other Indic Languages:	29 (0.1%)
Other Indo-European Languages:	82 (0.3%)
Chinese:	592 (1.9%)
Japanese:	372 (1.2%)
Korean:	304 (1.0%)

Mon-Khmer, Cambodian:	10 (0.0%)
Miao, Hmong:	0 (0.0%)
Thai:	0 (0.0%)
Laotian:	9 (0.0%)
Vietnamese:	19 (0.1%)
Other Asian Languages:	180 (0.6%)
Tagalog:	306 (1.0%)
Other Pacific Island Languages:	28 (0.1%)
Hungarian:	0 (0.0%)
Arabic:	96 (0.3%)
Hebrew:	51 (0.2%)
African Languages:	24 (0.1%)
Other and unspecified Languages:	16 (0.0%)
Non-English Speaking:	6628 (20.9%)

Place of Birth for the Foreign-Born	
Country	Persons
Foreign-Born Population:	5778
Europe:	2180 (37.7%)
Asia:	2512 (43.5%)
Africa:	190 (3.3%)
Oceania:	8 (.1%)
Americas:	888 (15.4%)
United Kingdom:	290 (5%)
Ireland:	46 (.8%)
Sweden:	34 (.6%)
Other Northern Europe:	18 (.3%)
Austria:	18 (.3%)
France:	112 (1.9%)
Germany:	251 (4.3%)
Netherlands:	33 (.6%)
Other Western Europe:	137 (2.4%)
Greece:	89 (1.5%)
Italy:	222 (3.8%)
Spain:	60 (1%)
Czechoslovakia:	49 (.8%)
Hungary:	6 (.1%)

Poland:	165 (2.9%)
Romania:	37 (.6%)
Belarus:	12 (.2%)
Russia:	109 (1.9%)
Ukraine:	121 (2.1%)
Yugoslavia:	161 (2.8%)
Other Eastern Europe:	207 (3.6%)
Mainland China:	158 (2.7%)
Hong Kong:	108 (1.9%)
Taiwan:	178 (3.1%)
Japan:	383 (6.6%)
Korea:	275 (4.8%)
India:	418 (7.2%)
Iran:	143 (2.5%)
Pakistan:	70 (1.2%)
Other Central Eastern Asia:	11 (.2%)
Cambodia:	10 (.2%)
Indonesia:	52 (.9%)
Laos:	9 (.2%)
Malaysia:	24 (.4%)
Philippines:	336 (5.8%)
Vietnam:	26 (.5%)
Other South Eastern Asia:	72 (1.2%)
Iraq:	19 (.3%)
Israel:	29 (.5%)
Jordan:	9 (.2%)
Lebanon:	21 (.4%)
Turkey:	134 (2.3%)
Armenia:	9 (.2%)
Other Western Asia:	6 (.1%)
Ethiopia:	23 (.4%)
Other Eastern Africa:	34 (.6%)
Egypt:	21 (.4%)
Other Northern Africa:	34 (.6%)
South Africa:	62 (1.1%)
Nigeria:	0 (0%)
Other Western Africa:	16 (.3%)
Australia:	8 (.1%)
Cuba:	33 (.6%)
Jamaica:	10 (.2%)
Trinidad Tobago:	21 (.4%)
Other Caribbean:	17 (.3%)
Mexico:	309 (5.4%)

Costa Rica:	0 (0%)
El Salvador:	14 (.2%)
Guatemala:	51 (.9%)
Nicaragua:	20 (.3%)
Panama:	11 (.2%)
Argentina:	60 (1%)
Brazil:	82 (1.4%)
Chile:	15 (.3%)
Colombia:	2 (0%)
Ecuador:	22 (.4%)
Guyana:	10 (.2%)
Peru:	14 (.2%)
Venezuela:	2 (0%)
Other South America:	0 (0%)
Canada:	194 (3.4%)
Income	
Income Breakdown	Households (%)
Less than \$15,000:	2222 (10.5%)
\$15,000 - \$25,000:	1205 (5.7%)
\$25,000 - \$50,000:	4573 (21.6%)
\$50,000 - \$75,000:	3699 (17.5%)
Greater than \$75,000:	9463 (44.7%)
Tenure	
Tenure Breakdown	Households (%)
Occupied Housing Units:	21148 (100.0%)
Owner Occupied:	9580 (45.3%)
Renter Occupied	